

34704-207

6/5/2014

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460



OFFICE OF
CHEMICAL SAFETY AND
POLLUTION PREVENTION

Premjit Halarnkar, Ph.D., MPA
Registration Manager
Loveland Products, Inc.
P.O. Box 1286
Greeley, CO 80632-1286

JUN 05 2014

Subject: Label Notification per PRN 98-10 – Revision of the ornamental crops statement
Product Name: Dimethoate 400
EPA Registration Number: 34704-207
Application Date: 6/5/2014
Decision Number: 491834

Dear Dr. Halarnkar,

The Agency is in receipt of your Application for Pesticide Notification under Pesticide Registration Notice (PRN) 98-10 for the above referenced product. The Registration Division (RD) has conducted a review of this request for its applicability under PRN 98-10 and finds that the action requested falls within the scope of PRN 98-10.

The Agency acknowledges the following label change:

1. Revision of the ornamental crops statement

The label submitted with the application has been stamped "Notification" and will be placed in our records. If you have any questions, you may contact me at (703) 347-0559 or via email at marchese.jacquelyn@epa.gov

Sincerely,

Jacquelyn Marchese

Jacquelyn Marchese, Entomologist
Insecticide-Rodenticide Branch
Registration Division (7505P)
Office of Pesticide Programs

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Please read instructions on reverse before completing form.

Form Approved, OMB No. 2070-0060

EPA Environmental Protection Agency United States Washington, DC 20460	<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number
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Application for Pesticide - Section I

1. Company/Product Number 34704-207	2. EPA Product Manager Venus Eagle	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) DIMETHOATE 400	PM# 1	
5. Name and Address of Applicant (Include ZIP Code) Loveland Products Inc. P.O. Box 1286 Greeley, CO 80632-1286 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application. Agency letter dated _____
<input checked="" type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For Section I and Section II.)

A minor revision on the label per EPA's email dated May 27, 2014.

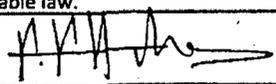
NOTIFICATION

JUN 05 2014

Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child Resistant Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	<input checked="" type="checkbox"/> Plastic
* Certification must be submitted	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	No. per container	<input type="checkbox"/> Glass
			N/A	N/A	<input type="checkbox"/> Paper
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container 2.5 GAL, 30 GAL, 55 GAL, BULK		5. Location of Label Directions <input checked="" type="checkbox"/> On Label <input type="checkbox"/> On Label accompanying product	
6. Manner in Which Label is Affixed to Product			<input type="checkbox"/> Lithograph	<input checked="" type="checkbox"/> Other	Self-Adhesive
			<input type="checkbox"/> Paper glued		
			<input type="checkbox"/> Stenciled		

Section - IV

1. Contact Point <i>(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</i>		
Name Premjit Halarnkar, Ph.D., MPA premjit.halarnkar@cpsagu.com	Title Manager of Registrations	Telephone No. (Include Area Code) (970) 685-3579
Certification		6. Date Application Received (Stamped)
I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statements may be punishable by fine or imprisonment or both under applicable law.		
2. Signature 	3. Title Manager of Registrations	
4. Typed Name Premjit Halarnkar, Ph.D., MPA premjit.halarnkar@cpsagu.com	5. Date 6/5/2014	

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June 5, 2014

Venus Eagle (PM 1)
Insecticide-Rodenticide Branch/Registration Division
Document Processing Desk (NOTIF)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Room S4900, One Potomac Yard
2777 S Crystal Drive
Arlington, VA 22202

**Subject: Dimethoate 400 (EPA Reg. No. 34704-207)
Submission of Revised Label**

Dear Ms. Eagle:

Per EPA's email dated May 27, 2014, Loveland Products is submitting this notification for the revised label for Dimethoate 400 (EPA Reg. No. 34704-207).

Enclosed, please find the following documents in support of this application.

1. Form 8570-1 Application
2. One copy of the red-lined label
3. One copy of the black-lined label

This notification is consistent with the provisions of PR Notice 98-10 and EPA regulations at 40 CFR 152.46, and no other changes have been made to the labeling or the confidential statement of formula of this product. I understand that it is a violation of 18 U.S.C. Sec. 1001 to willfully make any false statement to EPA. I further understand that if this notification is not consistent with the terms of PR Notice 98-10 and 40 CFR 152.46, this product may be in violation of FIFRA and I may be subject to enforcement action and penalties under sections 12 and 14 of FIFRA.

If you have any questions, please contact me at (970) 685-3579 or by email:
premjit.halarnkar@cpsagu.com

Sincerely,

A handwritten signature in black ink, appearing to read "Premjit Halarnkar", with a long horizontal flourish extending to the right.

Premjit Halarnkar, Ph.D., MPA
Registration Manager

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NOTIFICATION

JUN 0 5 2014



GROUP 1B INSECTICIDE

DIMETHOATE 400

Organophosphate Insecticide
SYSTEMIC INSECTICIDE-MITICIDE

ACTIVE INGREDIENT:

Dimethoate (O,O-dimethyl-S-[(methylcarbamoyl) methyl] phosphorodithioate)	43.5%
OTHER INGREDIENTS:*	56.5%
TOTAL	100.0%

*This product contains petroleum distillates.
(1.0 gallon contains 4.0 pounds of dimethoate)

KEEP OUT OF REACH OF CHILDREN WARNING—AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

See Below For Additional Precautionary Statements

DO NOT STORE BELOW 45 °F.

FIRST AID	
If swallowed:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Do not give any liquid to the person. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in eyes:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
If on skin or clothing:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15 to 20 minutes. • Call a poison control center or doctor for treatment advice.
If inhaled:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. • Call a poison control center or doctor for further treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. NOTE TO PHYSICIANS: Contains petroleum distillate. Vomiting may cause aspiration pneumonia. Contains an organophosphate that inhibits cholinesterase. Atropine is antidotal only if symptoms of cholinesterase inhibition are present. Pralidoxime chloride (2-PAM; PROTOPAM chloride) may be effective as an adjunct to atropine. Use according to label directions. FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565.</p>	

EPA REG. NO. 34704-207
EPA EST. NO. 34704-MS-001
NET CONTENTS 2.5 GAL (9.46 L)

020614 V2D 06Y14

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**DIMETHOATE 400
EPA REG. NO. 34704-207**

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
WARNING**

May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin.

Personal Protective Equipment (PPE):

Some materials that are chemical-resistant to this product are barrier laminate, butyl rubber (> 14 mils), nitrile rubber (> 14 mils) and viton (> 14 mils). If you want more options, follow the instructions for category "F" on an EPA chemical-resistance category selection chart.

Mixers, loaders, applicators, flaggers, and other handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Protective eyewear (goggles, face shield, or safety glasses),
- A NIOSH-approved dust mist filtering respirator with MSHA/NIOSH approval number prefix TC-21C or a NIOSH-approved respirator with any R, P, or HE filter,
- Chemical-resistant apron when mixing, loading, cleaning up spills, or equipment.

See Engineering Controls for additional requirements and exceptions.

User Safety Requirements:

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

Engineering Controls:

Mixers and loaders supporting aerial application to alfalfa, corn, cotton, safflower, sorghum, soybeans, and wheat must use a closed system that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4)]. The system must be capable of removing the pesticide from the shipping container and transferring it into mixing tanks and/or application equipment. At any disconnect point, the system must be equipped with a dry disconnect or dry couple shut-off device that is warranted by the manufacturer to minimize drippage to no more than 2.0 ml per disconnect. **In addition, mixers and loaders must:**

- Wear the personal protective equipment required on this labeling for mixers/loaders, except no respirator is required;
- Wear protective eyewear, if the system operates under pressure; and
- Be provided and have immediately available for use in an emergency, such as a broken package, spill, or equipment breakdown, chemical resistant footwear and a respirator of the type specified in the PPE section of this labeling.

Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. Pilots need not wear the PPE required in this labeling for applicators, but must wear at least a long-sleeved shirt, long pants, shoes, and socks.

When handlers use closed systems, or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-5)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife and aquatic invertebrates. This product is highly toxic to bees and other pollinators exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees or other pollinating insects are foraging in the treatment area.

DIMETHOATE 400
EPA REG. NO. 34704-207

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

Dimethoate is known to leach through soil into ground water under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground-water contamination.

This product may contaminate water through drift of spray in wind. This product has a high potential for runoff for several days after application. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product.

A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours.

A vegetative filter strip constructed and maintained in accordance with the 2000 Natural Resources Conservation Service publication Conservation Buffers to Reduce Pesticide Losses (<http://www.nrcs.usda.gov/feature/buffers/>) will significantly reduce the potential for contamination of water from rainfall-runoff.

PHYSICAL AND CHEMICAL HAZARDS

Combustible. Do not use or store the product near heat or open flame.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product is for use in commercial settings only. Use in residential settings is prohibited.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

High Pressure Handwand Equipment: When applications are made by high pressure handwand equipment, the maximum application rate for all crops and use-patterns is 0.0025 pound active ingredient per gallon.

Requirements for Reducing Spray Drift:

Do not apply under circumstances where possible drift to unprotected persons or to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use, or consumption can occur.

1. Use the largest droplet size consistent with acceptable efficacy. Formation of very small droplets may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure. For groundboom and aerial applications, use medium or coarser spray nozzles according to ASAE 572 definition for standard nozzles or a volume mean diameter (VMD) of 300 microns or greater for spinning atomizer nozzles.
2. Make aerial or ground applications when the wind velocity favors on target product deposition. Apply only when the wind speed is less than or equal to 10 mph. For all non-aerial applications, wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.
3. Do not make aerial or ground applications into areas of temperature inversions. Inversions are characterized by stable air and increasing temperatures with increasing distance above the ground. Mist or fog may indicate the presence of an inversion in humid areas. Where permissible by local regulations, the applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.
4. Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift. Avoid spraying during conditions of low humidity and/or high temperatures.
5. All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.
6. For groundboom applications, apply with nozzle height no more than 4 feet above the ground or crop canopy.
7. For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.
8. For aerial applications, release spray at the lowest height consistent with efficacy and flight safety. If the application includes an aquatic buffer zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

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**DIMETHOATE 400
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9. For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used and must not exceed 75% of the wingspan or 90% of rotor blade diameter. Use upwind swath displacement.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI).

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposure.

Notify workers of the application by warning them orally and by posting warning signs at entrances to treated area.

AERIAL APPLICATION: USE AUTOMATIC FLAGGING DEVICES WHENEVER FEASIBLE.

**APPLICATION THROUGH IRRIGATION SYSTEMS-
CHEMIGATION**

Apply this product only through sprinkler, including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border; or drip (trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Mix in clean supply tank the specified amount of this product for acreage to be covered, and needed quantity of water.

This product should not be tank-mixed with other pesticides, surfactants or fertilizers unless prior use has shown the combination non-injurious under your conditions of use.

Follow precautionary statements and directions for all tank-mixed products.

On all crops, use sufficient gallonage of water to obtain thorough and uniform coverage, but not cause runoff or excessive leaching. This will vary depending on equipment, pest problem and stage of crop growth. Application of more or less than optimal quantity of water may result in decreased chemical performance, crop injury or illegal pesticide residues.

Meter this product into the irrigation water uniformly during the period of operation. Do not overlap application. Follow specified label rates, application timing, and other directions and precautions for crop being treated.

Continuous mild agitation of pesticide mixture may be needed to assure a uniform application, particularly if the supply tank requires a number of hours to empty.

CHEMIGATION SYSTEMS CONNECTED TO PUBLIC WATER SYSTEMS

Note: Loveland Products, Inc. does not encourage connecting chemigation systems to public water supplies. The following information is provided for users who have diligently considered all other application and water supply options before electing to make such a connection.

**DIMETHOATE 400
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Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in cases where there is no water pump, when the water pressure decreased to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

SPRINKLER CHEMIGATION (FOLIAR SPRAY USES)

The system must contain a functional check valve vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Do not apply when wind speed favors drift beyond the area intended for treatment.

FLOOD (BASIN), FURROW AND BORDER CHEMIGATION (SOIL DRENCH USES)

Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

- a. The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
- b. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
- c. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
- d. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
- e. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
- f. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

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**DIMETHOATE 400
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DRIP (TRICKLE) CHEMIGATION (SOIL DRENCH USES)

The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.

The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

USE DIRECTIONS

BEFORE USING, READ WARNING STATEMENTS ON CONTAINER LABEL.

This product is for use in conventional hydraulic sprayers, ground applicators, aerial sprayers and listed chemigation equipment. Do not apply when weather conditions favor drift of spray from treated areas. Repeat applications as necessary unless otherwise specified. Consult your state experiment station or state extension service for proper timing of applications.

Dimethoate 400 has systemic and contact activity against a broad spectrum of piercing, sucking and chewing insects.

COMPATIBILITY: Dimethoate 400 is compatible in spray tank mixes with most insecticides, miticides, and fungicides, provided they are not alkaline in reaction.

FOR PROPER MIXING, SPRAY TANK MUST BE AT LEAST THREE-QUARTERS FILLED WITH WATER BEFORE ADDING DIMETHOATE 400. MECHANICAL AGITATION OR RECIRCULATION THROUGH PUMP BYPASS TO TANK IS USUALLY SUFFICIENT FOR MAINTAINING A GOOD DISPERSION.

To increase the consistency and performance of Dimethoate 400 when less than ideal water conditions exist (when pH is greater than 7), use LI 700® at 1.0 pint per 100 gallons of spray mixture.

Spray tank mixtures of Dimethoate 400 with alkaline insecticides and fungicides should be applied promptly.

ODOR: Dimethoate 400 formulations may produce a distinctive odor during the spray operation, but under normal conditions this odor does not persist.

Aerial Applications: Apply at least 1.0 gallon of finished spray per acre. Apply at least 5.0 gallons of finished spray per acre in California. Automatic flagging devices should be used whenever feasible.

If human flaggers are employed, they must wear the protective clothing and respirator specified on this label.

Ground Applications: Use water for dilution and apply at least 5.0 gallons of finished spray per acre unless otherwise directed.

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**DIMETHOATE 400
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**FRUIT TREES
(INCLUDING NONBEARING AND NURSERY STOCK)**

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Pears	Aphids Leafhoppers Mites (except Rust mite) Pear psylla	0.5 to 1.0 pt/100 gal water (0.25 to 0.5 lb AI/100 gal)	28
Do not apply when trees or substantial numbers of weeds in the orchard are in bloom. Maximum application rate: 1.0 pound active ingredient per acre. Maximum total application rate per year: 1.0 pound active ingredient per acre. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.			
Cherries Preharvest Idaho, Oregon and Washington only	Aphids Cherry fruit fly Mites	Dilute Applications: 0.5 pt/A (0.25 lb AI/A) in a minimum of 100 gal water; Concentrate Applications: Use up to 2.66 pt/A (1.33 lb AI/A) in a minimum of 50.0 gal water	21 Concentrate sprays should be used with caution to avoid fruit marking and injury. Make a single application within 7 days of adult fly emergence in the area. This single application should be made in late May or early June when the fruit are small in size.
Maximum application rate: 1.33 pounds active ingredient per acre. Maximum total application rate per year: 1.33 pounds active ingredient per acre. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.			
Cherries Postharvest (trees after harvest) Idaho, Oregon, and Washington only	Aphids Cherry fruit fly Mites	Dilute Applications: 1.0 pt/100 gal water Do not exceed 2.66 pt/A or 1.33 lb AI/A	Make a single application a minimum of 7 days after final harvest or apply in cases where a decision is made not to harvest due to poor fruit quality, a light crop, or unfavorable market conditions. For best results, make application before fruit hardens or drops.
Maximum application rate: 1.33 pounds active ingredient per acre. Maximum total application rate per year: 1.33 pounds active ingredient per acre. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.			

**CITRUS TREES INCLUDING
NONBEARING AND NURSERY STOCK**

Consult your state agricultural experimental station or state agricultural extension service for proper timing application.
Restrictions: Maximum application rate: 1.0 pound active ingredient per acre per year. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Grapefruit Lemons Oranges Tangerines	Aphids	Ground Equipment: 0.5 to 1.0 pt/100 gal water. Apply as an outside coverage spray.	15
	Mites (except Rust mite)	Ground Equipment: 0.5 to 1.0 pt/100 gal water. Apply as a thorough distribution coverage spray.	15
	Scales (except Black or Snow)	Ground Equipment: 1.0 to 1.5 pt/100 gal water. Apply as a thorough coverage spray.	15

Cont'd. next page

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Citrus Trees Including Nonbearing and Nursery Stock cont'd.:

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Grapefruit Lemons Oranges Tangerines	Thrips	Ground Equipment: 0.5 to 1.0 pt/100 gal water. Apply as a mist spray.	15
	Whiteflies Citrus psyllid	Ground Equipment: 1.0 pt/100 gal water. Apply as a thorough distribution coverage spray. Aerial application: 1.0 pt in a minimum of 5.0 gal water.	15
Thorough coverage is necessary. Do not apply when trees or substantial number of weeds in the grove are in bloom. Do not use on citrus seedlings. Make no more than 2 applications to mature fruit.			
CITRUS: (California, Arizona: Nonbearing and nursery stock) Grapefruit Lemons Oranges Tangerines	Aphids Thrips	Foliar Spray: 1.0 pt/100 gal water	15 Repeat applications as necessary. May be applied in the year grapefruit, lemon, orange and tangerine trees begin to bear fruit.
		Soil Drench (trees 1 to 3 yr old): 1.0 qt/A	Apply in the furrow or basin around the base of tree. Apply when insect injury to new growth appears.
Do not apply to trees that will bear fruit within 1 year. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.			
CITRUS: Grapefruit Lemons Oranges Tangerines (Arizona only)	Thrips	Aerial application: 2.0 pt/5.0 gal water Ground application: 2.0 pt/20.0 gal water	15
	The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.		

Note: Use of dimethoate is prohibited during any time of day in any given orchard from when that orchard has 10% open blooms until such time as there has been at least 75% petal fall on the north side of the trees. Applications of dimethoate shall be limited to that period of time between one (1) hour after sunset to three (3) hours before sunrise when any one of the following conditions prevail: 1) Before the onset of petal fall, the orchard to be treated has open blooms present and these open blooms represent less than 10% of the total anticipated blooms in the orchard. 2) After the initiation of petal fall there are less than 25% of open blooms remaining in the orchard to be treated. 3) It is between the calendar dates of February 15th and May 1st.

All applications of dimethoate on citrus must be documented on Form 1080 written either by a pest control advisor, farm owner or farm manager as is normally required for custom applications of pesticides; except that private applicators may omit the "Pesticide Application Report" section. The description of the status of bloom of the orchard to be treated as it was at the time of the application shall be indicated in the section for "Label Restrictions/Special Instruction." Both private and custom applicators shall mail to the Agriculture Department's Phoenix office the original or each completed Form 1080 done in accordance with this label. Each Form 1080 shall be post-marked not later than Monday following the week in which the application was made, except when holidays intervene.

PECANS
FOR COMMERCIAL USE ONLY

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Pecans	Aphids Leafhoppers Mites	0.66 pt/A (0.33 lb AI/A)	21
Maximum application rate: 0.33 pound active ingredient per acre and no more than 1 application per year. The REI is 48 hours.			

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VEGETABLE CROPS
FOR COMMERCIAL USE ONLY

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Asparagus (Do not use on Asparagus in California or Arizona)	Aphids Asparagus beetles	1.0 pt/A (0.5 lb AI/A)	180 Apply after the last harvest.
	Do not apply less than 180 days before harvest. Maximum single application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.		
Beans (including fresh, Snap, Lima and dry; excluding Cow peas)	Aphids Bean leaf beetle Grasshoppers Leafhoppers Leaf miners Lygus bugs Mexican bean beetle Mites	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	Beans may be harvested mechanically on day of application.
	This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum single application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.		
Broccoli Cauliflower	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	7
	Maximum application rate: 0.5 pound active ingredient per acre, 7-day retreatment interval. Maximum total rate per season: 1.5 pounds active ingredient per acre. The REI is 48 hours; however, the REI is increased to 72 hours in outdoor areas where the average annual rainfall is less than 25 inches per year.		
Brussels sprouts	Aphids Apply when insects first appear and repeat as needed.	Ground-Equipment: Apply up to 1.0 pt/A (0.5 lb AI/A) in a minimum of 100 gal of water/A. Do not apply by air.	10
	Maximum application rate: 0.5 pound active ingredient per acre, 7-day retreatment interval. Maximum total rate per year: 1.5 pounds active ingredient per acre. The REI is 48 hours; however, the REI is increased to 72 hours in outdoor areas where the average annual rainfall is less than 25 inches per year.		
Celery (Florida)	Carmine mite Leaf miners Two-spotted spider mite	1.0 pt/A (0.5 lb AI/A)	7
	Maximum application rate: 0.5 pound active ingredient per acre, 7-day retreatment interval. Maximum total rate per year: 1.5 pounds active ingredient per acre. The REI is 48 hours.		
Garbanzo beans	Aphids Grasshoppers Leafhoppers Leaf miners Lygus bugs Mites	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	Beans may be harvested mechanically on day of application.
	This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.		
Endive Escarole Kale Leaf lettuce Mustard greens Swiss chard Turnip (greens and roots)	Aphids Leafhoppers Leaf miners	0.5 pt/A (0.25 lb AI/A)	14
	Endive, Escarole, Leaf lettuce and Swiss chard: Maximum application rate: 0.25 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per year: 0.5 pound active ingredient per acre. The REI is 48 hours. Kale: Maximum application rate: 0.25 pound active ingredient per acre, 15-day reapplication interval. Maximum total rate per year: 0.5 pound active ingredient per acre. The REI is 48 hours. Mustard greens: Maximum application rate: 0.25 pound active ingredient per acre, 9-day reapplication interval. Maximum total rate per year: 0.5 pound active ingredient per acre. The REI is 48 hours. Turnips: Maximum application rate 0.25 pound active ingredient per acre, 3-day reapplication interval. Maximum total rate per year: 1.75 pounds active ingredient per acre. The REI is 48 hours.		

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Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Lentils	Lygus bug	1.0 pt/A (0.5 lb AI/A)	14
	Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.		
	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	14
This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Lupine	Aphids	0.5 to 1.0 pt/A	Apply when Aphids first appear. Lupine may be harvested mechanically on day of application.
	Lygus bugs	(0.25 to 0.5 lb AI/A)	
Do not feed treated vines. This pesticide is highly toxic to bees, do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Melons (except watermelons)	Aphids	1.0 pt/A (0.5 lb AI/A)	3
	Leafhoppers Leaf miners Thrips		
Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total application rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Watermelons	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	3
	Leafhoppers Leaf miners		
Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total application rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Peas (succulent)	Aphids	0.32 pt/A (0.16 lb AI/A)	Peas may be harvested mechanically on day of application.
	This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum application rate 0.16 pound active ingredient per acre. Maximum total rate per year: 0.16 pound active ingredient per acre. The REI is 48 hours. Not for use on field peas.		
Peppers	Aphids	0.5 to 0.6 pt/A (0.25 to 0.33 lb AI/A)	Peppers may be harvested mechanically on day of application.
	Leaf miners Maggots		
Maximum application rate 0.33 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per year: 1.65 pound active ingredient per acre. The REI is 48 hours.			
Potatoes	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	Potatoes may be harvested mechanically on day of application.
	Grasshoppers Leafhoppers Leaf miners		
Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Tomatoes	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	7
	Leafhoppers Leaf miners		
Maximum application rate 0.5 pound active ingredient per acre, 6-day reapplication interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			

Where Cabbage worms and Cabbage loopers are a problem, the above rates of Dimethoate 400 are compatible with endosulfan or malathion. Use in accordance with the manufacturers directions for control of these insects.

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FIELD AND SEED CROPS

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
FIELD CROPS: Alfalfa (Hay)	Aphids Grasshoppers Leafhoppers Plant bugs including Lygus reduction of Alfalfa weevil larvae	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	10
	This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Do not apply within 10 days of harvest or pasturing. Maximum application rate: 0.5 pound active ingredient per acre. Maximum total rate per crop cycle or cutting: 0.5 pound active ingredient per acre. The REI is 48 hours.		
Field Corn Popcorn (corn grown for seed)	Aphids Banksgrass mites (excluding Trans-Pecos area of Texas) Bean beetle Corn rootworm adult Two-spotted spider mite	0.6 to 1.0 pt/A (0.33 to 0.5 lb AI/A)	14 - forage 28 - grain Apply as necessary. Crops may be more susceptible to injury in the early reproductive stages.
	Grasshoppers	1.0 pt/A (0.5 lb AI/A)	
Do not apply to corn during the pollen-shed period if bees are present. Maximum application rate: 0.5 pound active ingredient per acre. Maximum total rate per year 0.5 pound active ingredient per acre. The REI is 48 hours.			
PROHIBITION: Workers are prohibited from entering the treated area to perform detasseling tasks for 4 days in nonarid areas and for 15 days in outdoor areas where the average annual rainfall is less than 25 inches per year.			
Cotton (grown in California and Arizona)	Fleahoppers Leafhoppers Plant bugs including Lygus	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	14
	Maximum application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.		
Cotton	Aphids Mites Thrips	0.25 to 0.5 pt/A (0.125 to 0.25 lb AI/A)	14
	Fleahoppers Plant bugs including Lygus	0.5 pt/A (0.25 lb AI/A)	
Maximum application rate: 0.5 pound active ingredient per acre, 14-day retreatment interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Safflower	Aphids Leafhoppers Plant bugs including Lygus Thrips	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	14
	Maximum application rate: 0.5 pound active ingredient per acre. Maximum total rate per crop cycle or cutting: 0.5 pound active ingredient per acre. The REI is 48 hours.		
Sorghum (milo)	Aphids	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	28
	Banksgrass mites (excluding Trans-Pecos area of Texas) Spider mites	1.0 pt/A (0.5 lb AI/A)	
	Grasshoppers	1.0 pt/A (0.5 lb AI/A)	
	Sorghum midge	0.25 to 0.5 pt/A (0.125 to 0.25 lb AI/A)	
Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total rate per season: 1.0 pound active ingredient per acre. The REI is 48 hours.			

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Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Soybeans	Aphids Bean leaf beetle Leafhoppers Mexican bean beetle Spider mites Three-cornered alfalfa hopper	1.0 pt/A (0.5 lb AI/A)	21
	Grasshoppers	1.0 pt/A (0.5 lb AI/A)	
Maximum application rate: 0.5 pound active ingredient per acre, 7-day reapplication interval. Maximum total application rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			
Wheat	Aphids (greenbugs)	0.5 to 0.75 pt/A (0.25 to 0.375 lb AI/A)	35
	Brown wheat mite	0.3 to 0.5 pt/A (0.16 to 0.25 lb AI/A)	
	Grasshoppers	0.75 pt/A (0.375 lb AI/A)	
Maximum single application rate: 0.5 pound active ingredient per acre. Maximum total application rate per crop cycle: 0.5 pound active ingredient per acre. The REI is 48 hours.			

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
SEED CROPS: Alfalfa	Aphids Leafhoppers Lygus bugs	0.5 to 1.0 pt/A (0.25 to 0.5 lb AI/A)	10
	Grasshoppers reduction of Alfalfa weevil larvae		
This pesticide is highly toxic to bees; do not apply if bees are visiting the areas to be treated when crop or weeds are in bloom. Maximum single application rate: 0.5 pound active ingredient per acre. Maximum total application rate per crop cycle: 0.5 pound active ingredient per acre. The REI is 48 hours.			
Grasses (grown for seed) (Idaho, Oregon & Washington only)	Aphids Plant bugs Thrips Winter grain mites	Apply 0.5 to 0.6 pt/A (0.25 to 0.33 lb AI/A) in a minimum of 2.0 gal water	Apply by ground or aerial application.
Maximum application rate: 0.5 pound active ingredient per acre, 90-day retreatment interval. Maximum total rate per year: 1.0 pound active ingredient per acre. The REI is 48 hours.			

Do not use on seed onions, seed carrots or seed bermuda grass.

ORNAMENTAL PLANTS AND CHRISTMAS TREES GROWN IN NURSERIES ONLY

Do not use on ornamental plants grown in greenhouses, Christmas tree and conifer plantations, landscapes, interiorscapes and residential, public, recreational, commercial, industrial and institutional establishments.

Dimethoate 400 is effective in controlling many sucking, piercing and chewing insects, including aphids, leaf miners, leafhoppers, mites, psyllids, scales and thrips that attack valuable ornamental plantings. For proper timing of treatments for the control of specific pests on ornamental plants, consult local agricultural authorities. Apply sprays uniformly and thoroughly to foliage, except as otherwise directed, when insects or their damage is first observed. Repeat applications as needed. Do not overdose or overspray.

SOIL INJECTION: For control of pests on any Ornamental species, a soil injection application can be used. **(DO NOT APPLY THIS PRODUCT BY SOIL INJECTION IN CALIFORNIA).**

Use a 1:2 dilution (1 part Dimethoate 400 to 2 parts water) for all soil injections. Inject 0.5 fluid ounce of dilution per inch of tree circumference (measure tree circumference at approximately 4 to 5 feet above ground level). Make injections within dripline of tree and into root zone at a depth appropriate for root uptake of the species type and species growth stage to be treated.

Application can be made once per growing season or twice for difficult to control species such as ELM LEAF BEETLE. For control of Elm leaf beetle, apply once shortly after trees leaf out, then follow with a second application 6 to 8 weeks later if necessary.

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IMPORTANT: Use injection equipment capable of delivering metered dosage to a soil depth of at least 6 inches. Number of injections should equal inches of tree circumference. Avoid direct injections into live root tissue. Water heavily after injection, at least 2 inches of water is recommended.

Some species such as Honeysuckle, River birch, Ornamental cherry, and Plum (*Prunus* spp.), Hawthorne, Japanese lace maple, and Aspens are more sensitive to Dimethoate 400 at early growth stages. Do not apply to sensitive species that have not been established for at least 3 years. **DO NOT USE ON BEARING FRUIT TREES.**

Always wear full PPE (Personal Protective Equipment) as described on page 2 of this label for application, mixing, loading and handling of Dimethoate 400. Chemical resistant headgear not necessary for soil injection.

DO NOT inject into soil areas where children or pets may dig or exhume treated soil. Do not make soil injections within 20 feet of edible crop gardens.

Do not use on ornamental plants that are not listed on this label unless a sample test area has shown Dimethoate 400 is not phytotoxic to your plants. A small test area should always be sprayed first before use. Do not use on any ornamental stock plants grown as a source of propagation material, such as cuttings, layers, root stocks or scions for grafting or budding. Do not use in spray mixtures containing oil. Do not use on plants growing in greenhouses.

Restrictions: Herbaceous Ornamentals: Maximum application rate: 0.25 pound active ingredient per acre. Maximum total rate per year: 0.25 pound active ingredient per acre. The REI is 48 hours.

Woody Ornamentals and Christmas Trees Nurseries: Maximum application rate 1.0 pound active ingredient per acre, 14-day reapplication interval. Maximum total rate per year: 3.0 pounds active ingredient per acre. When applications are made by high pressure hand wand equipment, the maximum application rate for all crops and use patterns is 0.0025 pound active ingredient per gallon. The REI is 10 days; however, the REI is increased to 14 days in outdoor areas where the average annual rainfall is less than 25 inches per year.

Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
Arborvitae	Aphids Bagworm Mites	3.5 fl oz in 10.0 gal water	
Azaleas	Lace bug Leaf miners Mites Tea scale Whiteflies	1.75 fl oz in 10.0 gal water	
Birch	Aphids Leaf miners	1.75 fl oz in 10.0 gal water	For Leaf miners, apply when leaves are expanded, about mid-May, and repeat in early July.
Boxwood	Leaf miners Mealybug Mites	1.75 fl oz in 10.0 gal water	For Leaf miners, apply in spring when Leaf miner flies first appear, or in early summer for control of larvae in the infested leaves.
Camellias	Aphids Camellia scale Mites Tea scale	Foliar spray: 1.75 fl oz in 10.0 gal water. Soil drench: 2.0 fl oz in 1.0 gal water. For plants up to 6' tall. Increase rate proportionately for larger plants.	Foliar spray: apply 2 sprays, 6 weeks apart the first year, followed by annual applications soon after first growth begins in the spring. Soil drench: apply as a soil drench around the base of plants in early spring.
Carnations	Aphids Mites Thrips	Soil drench: 2.0 fl oz /500 sq ft of bed or bench	Apply in sufficient water for even distribution. Water in thoroughly following application.
Cedar	Mites	3.5 fl oz in 10.0 gal water	
Cypress	Bactra moth larvae	1.75 fl oz in 10.0 gal water	Apply as a drenching spray.
Daylillies	Aphids Thrips	3.5 fl oz in 10.0 gal water	
Douglas fir	Fir cone midge	6.5 fl oz in 10.0 gal water	Make thorough coverage application when cones are closed and pendant. Use hydraulic or backpack sprayer.
Euonymus	Aphids Scale	3.5 fl oz in 10.0 gal water	

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Crops	Pests Controlled	Rate	Interval (Days) Between Last Application and Harvest
<i>Ficus nitida</i>	Thrips	1.75 fl oz in 10.0 gal water	
Gardenias	Tea scale Whitefly	1.75 fl oz in 10.0 gal water	
Gerberas	Thrips	1.75 fl oz in 10.0 gal water	
Gladiolus	Aphids Thrips	1.75 fl oz in 10.0 gal water	
Hackberry	Hackberry budgall psyllid Hackberry nipplegall psyllid	6.0 fl oz in 10.0 gal water	Apply prior to bud break. Do not apply to plants that have not been established for at least 3 years.
Hemlock	Mites Scale	1.75 fl oz in 10.0 gal water	
Holly (English & American) not Burford variety	Leaf miners Mites Soft scale	1.75 fl oz in 10.0 gal water	For Leaf miners, apply in spring when Leaf miner flies first appear, or in early summer, for control of larvae in infested leaves.
Honeysuckle	Honeysuckle aphid	3.5 fl oz in 10.0 gal water	Do not apply to plants that have not been established for at least 3 years.
Iris	Aphids Iris borer Thrips	3.5 fl oz in 10.0 gal water	For Borer control, spray when new leaves are 5 to 6 inches tall.
Juniper and other evergreen species	Aphids Bagworms Midges Mites	3.5 fl oz in 10.0 gal water	
Oak	Golden oak scale	3.5 fl oz in 10.0 gal water	
Pines	Loblolly pine sawfly Nantucket pine tip moth	6.0 fl oz in 10.0 gal water	Apply when most larvae are in the second and third instars.
	Zimmerman pine moth	3.5 fl oz in 10.0 gal water	Spray in mid-April and/or in early September for larvae control.
Pinyon pine	Pinyon needle scale Pinyon "pitch mass" borer Pinyon spindle gall midge Tip moth	25.5 fl oz in 10.0 gal water	Apply spray to egg masses at the base of the trees and to all rough bark and crotches that can be reached from the ground. Make this bark application when crawlers start to emerge from the eggs. Use hydraulic or backpack sprayer. Do not spray leaves or needles since phytotoxicity may result. For Spindle gall midge and Tip moth, apply in mid to late spring. For Pinyon borer, make application in early summer.
Poinsettia	Aphids Mealybug Mites Whitefly	1.75 fl oz in 10.0 gal water	
<i>Prunus</i> spp.	Aphids Leafhoppers Mites Thrips	6.0 fl oz in 10.0 gal water	
Roses	Aphids Leafhoppers Mites Thrips	6.0 fl oz in 10.0 gal water	
Taxus (upright or spreading yew)	Fletcher scale Mealybug Mites	3.5 fl oz in 10.0 gal water	

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Crops	Pests Controlled	Rate
Christmas trees	Bagworms Balsam twig aphid Blue aphid European pine shoot moth Mites Nantucket pine tip moth Zimmerman pine moths	Use 1.0 to 1.5 pt/A in 30.0 to 50.0 gal of water with a mist blower. Use 1.0 tblsp in a backpack or hand held sprayer.
Ornamental shade and nursery trees	Aphids Elm leaf beetle	Soil Injection: Use 2.5 to 3.5 ml of product/inch of tree circumference measured at approximately 4.5 to 5 ft above ground level. For Aphid control, make 1 application. A second application 6 to 8 weeks later may be required during seasons of extreme pest pressure. Make 2 applications per season for Elm leaf beetle; once shortly after trees leaf out, and once 6 to 8 weeks later. Some species such as River birch, (<i>Prunus</i> spp.), Ornamental cherry, Hawthorne, Japanese lace maple and Aspens may show phytotoxic effects at label rates. DO NOT USE ON BEARING ORNAMENTAL TREES. Use a Kioritz Injector with a 6-inch probe tip or similar type equipment capable of delivering metered dosage. Follow Personal Protective Equipment section of this label. Insert product 4 to 6 inches below ground surface. Equally distribute injections radially in the area around the tree trunk to drip line. Number of insertions should equal inches of tree circumference. Do not inject concentrate directly into live root tissue. Water heavily after injection. At least 2 inches of water is recommended. CAUTION - DO NOT USE ON JAPANESE MAPLES OR RED LEAF ORNAMENTAL SPP.

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container. Do not store under conditions which might adversely affect the container or its ability to function properly.

Do not ship or store with food, feeds, drugs, or clothing.

Do not cut or weld metal containers.

PESTICIDE STORAGE: Do not store below temperature of 45 °F. Store in safe manner. Store in original container only. Keep container tightly closed when not in use. Reduce stacking height where local conditions can affect package strength. Personnel should use clothing and equipment listed under "PRECAUTIONARY STATEMENT" when handling open containers.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(For packages up to 5 gallons:) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

(For packages greater than 5 gallons or 50 lbs:) Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. **Pressure rinse as follows:** Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

(For square bottom caged totes greater than 55 gals:) Triple rinse or pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Fill the container about 1/4 full with water, rinsing down all sides inside the container thoroughly. Recirculate water with the pump for 2 minutes. Empty the rinsate

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Storage & Disposal cont'd.:

into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.
(For refillable containers:) Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.
For help with any spill, leak, fire or exposure involving this material, call day or night CHEMTREC – 1-800-424-9300.

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

BEFORE BUYING OR USING THIS PRODUCT, read the entire Directions for Use and the following Conditions of Sale and Limitation of Warranty and Liability. By buying or using this product, the buyer or user accepts the following Conditions of Sale and Limitation of Warranty and Liability, which no employee or agent of LOVELAND PRODUCTS, INC. or the seller is authorized to vary in any way.

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